Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A bone screw comprising:

an elongated tube having a first end, a second end and a tubular wall defining an interior opening extending from the first end to the second end, the tube being suitable for implanting in a living body;

a tip at the first end of the tube; and

an elongated holding element having a first end section connected to the second end of the tube, a second end section opposite the first end section having a surface configured to cooperate with a screw-in tool and an elongated rod-like middle section between the first end section and the second end section having a longitudinal length, the tube and the holding element defining a longitudinal axis extending from the first end to the second end of the tube and along the longitudinal length of the holding element from the first end section to the second end section;

wherein the tube further comprises a bone thread on an outside surface of the tubular wall and the tubular wall comprises a plurality of recesses through the tubular wall to the interior opening forming a mesh-like open network;

wherein a diameter along an entire length of the tube is greatest at an outer diameter of the bone thread such that the tube is fully immersed in an opening created when screwing in;

wherein the length of the middle section of the holding element extending along the longitudinal axis is greater than the greatest outer diameter of the bone thread of the tube; and

wherein the holding element is suitable to transfer torque applied to the second end section from a screw-in tool to the tube to screw-in and fully immerse the tube into a bone.

2. (Canceled)

3. (Previously Presented) A bone screw according to claim 1, wherein the tube further comprises a first internal thread section at its second end and the first end section of the holding element comprises an external thread for cooperation with the first internal thread section.

4. (Withdrawn) A bone screw according to claim 1, wherein the second end of the tube and the first end section of the holding element are fixed to each other along unthreaded surfaces so as to form a press fit that prevents movement in opposite directions along the longitudinal axis.

5. (Previously Presented) A bone screw according to claim 1, wherein the second end section comprises an engagement element for cooperation with a screw-in tool.

6. (Canceled)

7. (Previously Presented) A bone screw according to claim 47, wherein the stop comprises a shoulder on the middle section of the holding element.

8. (Previously Presented) A bone screw according to claim 1, wherein the tube further comprises a stop located on an inside surface of the tubular wall to engage and prevent further penetration of the holding element into the tube.

9. (Canceled)

10. (Previously Presented) A bone screw according to claim 3, wherein the tube further comprises a second internal thread section at the first end.

11. (Withdrawn) A bone screw according to claim 1, wherein an internal thread section extends over a full length of the tube and the tip is structured and arranged to cooperate with the internal thread section.

12. (Previously Presented) A bone screw according to claim 3, wherein the first internal thread section comprises a metric or an inch thread.

13. (Withdrawn) A bone screw according to claim 1, wherein the tip is structured and arranged as a self-tapping tip.

14. (Original) A bone screw according to claim 1, wherein the tip comprises a cannula.

15. (Original) A bone screw according to claim 14, wherein the holding element comprises a cannula.

16. (Original) A bone screw according to claim 1, wherein the holding element comprises a cannula.

17. (Currently Amended) A bone screw comprising:

a one-piece elongated tube with a tubular wall and having a first open end extending through the elongated tube to a second open end, the tube defining a longitudinal axis extending from the first open end to the second open end of the tube, the tubular wall containing a plurality of recesses through the tubular wall forming a mesh-like open network, the tube being suitable for implanting in a living body;

a tip connectable to the first open end of the tube; and

an engagement element at the second open end that cooperates with a screw-in tool;

wherein the tube further comprises:

a bone thread on an outside surface of the tubular wall along a section of the tubular wall, the section~~and~~ having a first length extending in a direction of the longitudinal axis from a first end of the bone thread adjacent the tip;

an adjoining section free of bone thread and having a second length extending in the direction of the longitudinal axis from a second end of the bone thread, the adjoining section comprising the second end of the tube;

wherein a greatest diameter of the entire adjoining section free of bone thread is less than or equal to a greatest outer diameter of the bone thread of the tube such that the bone screw is fully immersed in an opening created when screwing in;

wherein the second length of the adjoining section extending along the longitudinal axis is greater than the greatest outer diameter of the bone thread of the tube; and

wherein the adjoining section is suitable to transfer torque applied to the second open end from a screw-in tool to the bone thread to screw-in and fully immerse the bone thread into a bone.

18. (Previously Presented) A bone screw according to claim 17, wherein the engagement element comprises an internal thread section at the second open end that cooperates with a screw-in tool.

19. (Previously Presented) A bone screw according to claim 17, wherein the engagement element comprises an internal thread section at the second open end, and the bone screw further comprises a driving element that cooperates with the engagement element and further cooperates with a screw-in tool.

20. (Previously Presented) A bone screw according to claim 17, wherein the engagement element comprises an internal thread section at the second open end, and the bone screw further comprises a fixation element that cooperates with the engagement element for fixing the bone screw.

21. (Original) A bone screw according to claim 17, wherein the second length of the adjoining section is the same as or greater than the first length of the bone thread section.

22. (Previously Presented) A bone fixation device comprising a bone screw according to claim 1, a plate for fixation of a bone, the plate comprising a recess through which the holding element can be passed, and a nut for cooperating with the holding element to fix the plate.

23. (Previously Presented) A bone fixation device comprising a bone screw according to claim 1 and a marrow nail for fixing a bone, the marrow nail comprising a recess through which the holding element is passed.

24-31. (Canceled)

32. (Previously Presented) A bone screw according to claim 1 further comprising a nut, wherein the holding element further comprises an external thread opposite the first end section and cooperating with the nut when the tube is fully immersed in a bone.

33. (Previously Presented) A bone screw of claim 32, wherein the first end section of the holding element is connected to the second end of the tube by a threaded connection.

34. (Withdrawn) A bone screw of claim 32, wherein the first end section of the holding element is connected to the second end of the tube by a press fit connection that prevents movement in opposite directions along the longitudinal axis.

35. (Previously Presented) A bone screw of claim 1, wherein the first end section of the holding element is connected to the second end of the tube by a threaded connection.

36. (Withdrawn) A bone screw of claim 1, wherein the first end section of the holding element is connected to the second end of the tube by a press fit connection that prevents movement in opposite directions along the longitudinal axis.

37. (Currently Amended) A method of attaching a bone screw to a bone wherein the bone screw comprises an elongated tube having a first end, a second end and a tubular wall defining an interior opening extending from the first end to the second end, the tube being suitable for implanting in a living body;

a tip at the first end of the tube; and

an elongated holding element having a first end section connected to the second end of the tube, a second end section opposite the first end section having a surface configured to cooperate with a screw-in tool and an elongated rod-like middle section between the first end section and the second end section having a longitudinal length, the tube and the holding element defining a longitudinal axis extending from the first end to the second end of the tube and along the longitudinal length of the holding element from the first end section to the second end section;

wherein the tube further comprises a bone thread on an outside surface of the tubular wall and the tubular wall comprises a plurality of recesses through the tubular wall to the interior opening forming a mesh-like open network;

wherein a diameter along an entire length of the tube is greatest at an outer diameter of the bone thread such that the tube is fully immersed in an opening created when screwing in; and

wherein a length of the middle section of the holding element extending along the longitudinal axis is greater than the greatest outer diameter of the bone thread of the tube; the method comprising:

connecting the first end section of the elongated holding element to the second end of the tube;

attaching a screw-in tool to the surface of the second end section of the holding element; and

fully introducing the elongated tube into the bone while the screw-in tool is attached to the surface of the second end section of the holding element.

38. (Previously Presented) A method of claim 37, further comprising filling at least a portion of the elongated tube with bone material.

39. (Previously Presented) A method of claim 38, further comprising filling the elongated tube with bone material before connecting the holding element to the elongated tube.

40. (Previously Presented) A method of claim 37, wherein connecting the holding element to the elongated tube comprises screwing a threaded portion of the first end section of the holding element into a threaded inner portion of the second end of the elongated tube.

41. (Withdrawn) A method of claim 37, wherein connecting the holding element to the elongated tube comprises press fitting the first end section of the holding element into the second end of the elongated tube to prevent movement in opposite directions along the longitudinal axis.

42. (Previously Presented) A method of claim 37, further comprising removing the holding element after the elongated tube is immersed into the bone.

43. (Previously Presented) The method of claim 37 further comprising attaching a fixation device to the holding element.

44. (Previously Presented) A method of claim 38 further comprising shortening the holding element.

45. (Previously Presented) A method of claim 43 wherein before attaching the fixation device, the method further comprises removing the holding element from the bone screw, applying a filler material into the interior opening of the tube, and reconnecting the holding element to the tube.

46. (Currently Amended) A method of claim 43 wherein the fixation device comprises a plate ~~of~~ or a marrow nail.

47. (Previously Presented) A bone screw according to claim 1 further comprising a stop for limiting a distance of insertion of the holding element into the tube.

48. (Currently Amended) A bone screw according to claim 47 wherein the stop is configured as a projection on the holding element, the projection extending in a direction transverse to the longitudinal axis, the first end section ~~protruding~~ starting from the projection and extending in a direction away from the second end section in the direction of the longitudinal axis, the projection preventing further penetration of the holding element into the tube.

49. (Currently Amended) A bone screw according to claim 48, wherein a greatest outer diameter of the projection is less than or equal to the greatest outer diameter of the bone thread of the tube so that ~~it~~ the projection does not form an obstacle in the bone opening when the bone screw is screwed into the bone.

50. (Currently Amended) A bone screw according to claim 1 wherein one of the first end section of the holding element and the tubular wall is located inside the other of the first end section of the holding element and the tubular wall to form an overlap along the longitudinal axis, ~~the~~ a length of ~~the middle section~~a remainder of the holding element along the longitudinal axis being longer than the overlap when the holding element and the elongated tube are fully assembled to each other.